What is claimed is

1. An electronic atomization cigarette, including a shell and a mouthpiece, characterized in that:

an air inlet (4) is provided on the external wall of the shell (14) ;

an electronic circuit board (3), a normal pressure cavity (5), a sensor (6), a vapor-liquid separator (7), an atomizer (9), a liquid-supplying bottle (11) are arranged sequentially within the shell (14),

wherein the electronic circuit board (3) comprises an electronic switching circuit and a high frequency oscillator;

a stream passage (18) is provided on one side of the sensor (6) and leading to the inner wall of the shell (14), in which sensor(6) is provided a negative pressure cavity (8);

an atomization cavity (10) is arranged in the atomizer (9) which atomizer (9) is in contact with the liquid-supplying bottle (11) and kept apart from the shell (14);

a retaining ring (13) for locking the liquid-supplying bottle (11) is provided between the shell (14) and one side of the liquid-supplying bottle (11), on the other side of which liquid-supplying bottle (11) is provided an aerosol passage (12);

the air inlet (4), normal pressure cavity (5), sensor (6), vapor-liquid separator (7), atomizer (9), aerosol passage (12), gas vent (17) and mouthpiece (15) are sequentially interconnected; and

a light emitting diode (LED1) and a battery(2) are provided at the front end within the shell (14), together forming the shape of a cigarette holder, a cigar or a pipe.

2. The electronic atomization cigarette according to claim 1, characterized in that:

the atomizer (9) is postposed within the shell (14);

the liquid-supplying bottle (11) is arranged between the vapor-liquid separator (7) and the atomizer (9); and

a spring piece (33) is arranged at one end of the liquid-supplying bottle (11) for pressing the bottle (11) onto the atomizer (9) tightly.

3. The electronic atomization cigarette according to claim 1 or 2, characterized in that:

a display screen (32) is arranged on the inner wall of the shell (14) and connected to the electronic circuit board (3).

4. The electronic atomization cigarette according to claim 1 or 2, characterized in that:

a microswitch (16) for manually cleaning is connected in parallel to the sensor (6) within the shell (14).

5. The electronic atomization cigarette according to claim 1 or 2, characterized in that:

a ripple film (22) is provided between the sensor (6) and its inner negative pressure cavity (8), and

a first magnetic steel (20), a second magnetic steel (21) and a reed switch(K1) connected between the first and second magnetic steels are provided within the sensor (6), wherein the second magnetic steel (21) is attached to the ripple film (22).

6. The electronic atomization cigarette according to claim 1 or 2, characterized in that:

a silicon gel check valve (31) is provided within the sensor (6);

a third magnetic steel (34) is provided in the silicon gel check valve (31); and

a reed switch (K1) is provided outside the valve, on the side close to the third magnetic steel.

7. The electronic atomization cigarette according to claim 1 or 2, characterized in that:

a through hole is arranged in the vapor-liquid separator (7).

8. The electronic atomization cigarette according to claim 7, characterized in that:

a silicon gel check valve (31) covers the outside of the through hole of the vapor-liquid separator (7).

9. The electronic atomization cigarette according to claim 1 or 2, characterized in that:

an overflow hole (29) is arranged on an atomization cavity wall (25) of the atomization cavity (10).

a heating element (RL) is provided within the atomization cavity (10);

a first air stream ejection hole (24) is provided on one side of the heating element (RL); and

a porous body (27) is arranged outside around the atomization cavity wall (25);

a first piezoelectric element (M1) is provided on one side of the atomizer (9) ; and

a bulge (36) is provided on the other side of the atomizer (9).

10. The electronic atomization cigarette according to claim 1 or 2, characterized in that:

a second piezoelectric element (35) is additionally provided in the atomizer (9).

11. The electronic atomization cigarette according to claim 9, characterized in that:

the porous body (27) in the atomizer (9) can be made of foam nickel, stainless steel fiber felt, high molecule polymer foam and foam ceramic;

the heating element (RL) can be made of platinum wire, nickel chromium alloy or iron chromium aluminum alloy wire with rare earth elements, and can be made into the shape of a sheet;

the atomization cavity wall (25) can be made of aluminum oxide or ceramics.

12. The electronic atomization cigarette according to claim 7, characterized in that:

the vapor-liquid separator (7) is made of plastics or silicon rubber.

13. The electronic atomization cigarette according to claim 1 or 2, characterized in that:

a solution storage porous body (28) is provided in the liquid-supplying bottle (11), wherein the porous body (28) is filled with polypropylene fiber, terylene fiber or nylon fiber, or with plastics that are shaped by foaming, or is molded into a column with laminated layers by polyvinyl chloride, polypropylene, polycarbonate.

14. The electronic atomization cigarette according to claim 5, characterized in that:

the reed switch(K1), the first magnetic steel (20) and the second magnetic steel (21) and the ripple film (22) may be replaced with a semiconductor strain gauge, wherein the strain guage possesses a sealed film and is installed at the position of the ripple film of the sensor.

15. The electronic atomization cigarette according to claim 1 or 2, characterized in that:

a nicotine solution that is injected into the liquid-supplying bottle (11) and used for atomization contains 0.4-3.5% nicotine, 0.05-2% cigarette essence, 0.1-3.1% organic acid, 0.1-0.5% anti-oxidation agent, the rest being 1,2-propylene glycol.